# Elevate AR 👄

**Group Members:** Yesenia Duran, Connor Ehlers, Lex Nelson, Jason Robinson, Daniel Tucker, Chanais Walker, Reegan Wieth

#### ...an AR platform to elevate cultural awareness

**Elevate AR** is a suite of digital tools allowing artists to curate and publish physical/digital art experiences in a novel format, using public elevators as both a metaphor and a physical interface. This proposal also includes an initial exhibition which demonstrates the potential of the platform and explores the question: "How do *you* experience humanity in your culture?"

Selected Track/Themes: This is a **Digital Culture Experiment** toward **Philanthropy and Art**. Elevate AR is a humanizing digital media project and curated art exhibition that ultimately seeks the *philanthropic* aim of providing creative tools for people to share their culture.

#### Overview

At its core, Elevate AR is a smartphone app experience that uses Augmented Reality (AR) as a means to explore curated digital art in a unique narrative format with a strong sense of *embodiment* and *place*: as rooms or scenes stacked atop each other like the floors of a building, using a physical elevator as an interface.

We envision two other layers to this project, though: 1) An inaugural exhibit which shows the potential of the experience by asking a diverse group of artists to visually answer the question, "How do you experience humanity in *your* culture?" 2) A set of tools that allow other artists across the world to create and distribute their own exhibits in the Elevate AR format — thus establishing Elevate AR as a platform.

#### lmagine... Jason Robinson

Following a set of enigmatic instructions from a trusted friend, you pack a small camera and seek out an elevator in a safe and familiar building in your community. You have been told only to open your heart and expect the wondrous.

The doors close behind you. You've been in this elevator dozens of times before, but *today* something is different: the buttons on the panel are labeled not with numbers, but beautiful symbols. What can it mean? Readying your camera, you press one of the buttons. The elevator lurches to life, as it has many times before — but *today*, you are seeing it with new eyes. As you feel the upward motion in your gut, you gasp lightly. Something else is new! — *today*, the elevator doors remain open, and as the panel announces each passing floor, you catch a glimpse of strange rooms you've never visited. The scenes are unfamiliar to you, but the emotions you feel are not — joy in fellowship, grief in loss, calm in mediation, celebration, connection.

The elevator comes to rest at your chosen floor. You raise your camera and snap the shutter. *Today*, there is so much more to explore.

### Imagine... (cont.) Lex Nelson

The Elevate AR experience may provide new perspective on a situation that is otherwise mundane — a new way to brush against the worlds of others, right at your fingertips. This is similar to the Meow Wolf experiences, in which a totally normal building or grocery store becomes a world of mystery when the viewer decides to dig deeper. (For more information, I recommend watching some videos about Omegamart!)

Because the viewer has the ability to physically adjust their view into the scene, they can discover small details that can help them discover a deeper story on each floor. One can create their own narrative based on the order in which they decide to view the exhibit's rooms, which details they decide to pay attention to, and which they choose to ignore.

#### Design Foundations Jason Robinson

#### Why AR?

Augmented Reality allows the mundane to mingle with the unexpected in profound ways. Experiencing physical spaces created by artists across the world in your own neighborhood brings a different perspective than viewing artwork in a book, or a website, or in a gallery.

#### Why an Elevator?

Technically, an elevator is a perfect 'container' for an AR experience — a safe, accessible, and constrained environment for which to design. Many environmental variables can be predicted — most elevators are small, rectangular spaces which move up and down in response to the press of a button. The use of an elevator panel as an interface for an art experience provides the viewer with a tactile sense of travel and motion. and introduces a bit of ritual: it takes some time and commitment to travel from one floor to another. It's an interesting environment from a creator's perspective too — all elevators have an implied linear progression, but of course viewers may view the content in any order they wish, and there is a possibility of the experience being "interrupted" by the daily business of other humans going about their days. (This is a feature, not a bug, by the way.)

## Why this inaugural exhibit?

Our first exhibit uses the very direct metaphor of rooms we'll be asking a collection of 6 artists to design rooms (either digitally in 3D or as 3D of scans of physical rooms) that display humanity as expressed by that artist's culture. As the viewer physically moves up and down to visit each room in the order they choose, it will be natural to juxtapose these rooms with the rooms which comprise their own life.

### Art Direction Chanais Sokia

#### Attracting Artists

Our goal is to attract artists across the world from different ages, cultures, and social standings. We want to exhibit the ten-year-old who uses the computer on his lunch breaks to create art because no one he knows can afford one. We also want the college-educated accountant who desires to pursue an art career but has no idea how to break through. We would love to showcase the 70-year-old lady who takes the most beautiful pictures with her friends at the park.

#### To attract artists, our Marketing team will:

- Send virtual flyers out to schools and universities around the world about the opportunities to participate in our virtual gallery.
- Use social media to create a buzz.
- Allow the artist to create one piece of merchandise that we will manufacture and sell through our app after the virtual session. The artist will receive 50% of the profit.

#### Choosing our First Artist

We will use our social media platform to engage with potential artists. Artists will be instructed to submit any piece of art they have created into a competition by tagging our Instagram page. We will feature 20 artists' submissions on our page for consideration, asking the public to comment on their favorite piece. We will use the top 6 artists as our featured artists for the first Elevate AR debut exhibit. Choosing our artists and using public engagement will be an excellent marketing strategy.

See next slide for examples of pieces from artists worldwide that convey humanity in different ways according to their culture. We would seek this type of diversity in style and approach.



Han Meilin is a contemporary Chinese artist known for both his paintings and sculptures of animals.



The dawn of human kindness by Gergely Gyuricza





Image posted on Twitter by Parveen Kaswan



Deridias Designs

Japanese sculptor Yoshitoshi Kanemaki is someone who chisels and forms life-sized figurative sculptures out of giant pieces of camphor wood.

### Technical Direction Daniel Tucker

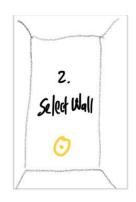
Elevate AR uses AI meshing, depth (raycasting) API, real-time tracking and registration technology. Using the camera from a LIDAR-enabled mobile device (iPhone 12/13 Pro, iPad Pro) artists can upload their "exhibit" from a real-world environment or use any digital device to create a 3D digital created environment.

Users interact with Elevate AR through their mobile device using the camera as a viewfinder. Scanning the environment around them, users will see on the screen they are in an elevator environment. In this elevator there is a "window" where the viewer can peer into each floor. Each artist would have their own floor space to creatively answer the question "How do you see humanity in your culture?

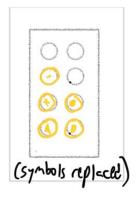
The elevator's button panel will be used to move the viewer both up and down through physical space, but also through the virtual space of the exhibit.

Videos/Sketches



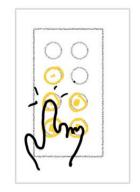




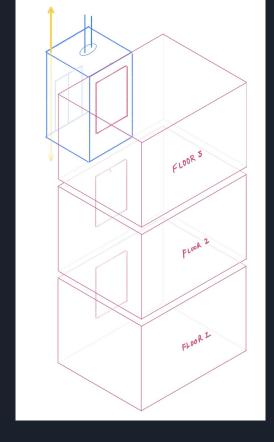












Pink lines represent AR elements: "portal" in elevator, and virtual rooms.



Video link: Prototype of two living rooms, scanned in 3D for usage in AR.



Video link: Early "virtual pie" test, showing the challenges of AR in moving elevators.

## Marketing Approach Reegan Wieth

Through the use of QR codes and NFC stickers placed near public elevators, curious people will be able to discover and immediately experience Elevate AR. But we need more than just a QR code. The QR code in and within itself has to draw someone's attention, so I will create a sticker type QR code that embodies the experience of where that code will take them. This QR Code will be intriguing, which will encourage and make people want to scan it to see what exactly it is. On top of that we will rely heavily on word of mouth.

So I will be putting advertisements on social media and public places that give people a glimpse of what it is. In these advertisements it is important to show both features of some of the art but also the idea of how it is an interactive experience. With social media so easy and convenient, we will utilize it as a platform to share our advertisements. Picture a 30-second fast- paced video of Elevate AR. We will end these so called "reels" with a QR code or a link that the viewer can then interact with. It will allow Elevate AR to be very hands-on and interactive right off the start. When we first launch, our inaugural exhibit will excite people as well. Those people will then share with their friends and their network about Elevate AR.

In situations like this where we are creating a virtual and individual experience, it will be essential to target an audience who is interested in things like this, and encourage them to tell others.

## Group Approach Connor Ehlers

Our group really hit the ground running with this project. Everyone from day one had great pitches for things we could do. The first one that we really got traction with was Connor's idea of an art gallery. The idea was thrown around of making it in a VR space so that people could enjoy it from their own homes. During our first Zoom call we started to iron out some of the details. We decided to move it from VR to AR so that it could be experienced from a cell phone instead of needing an expensive VR Headset. To give the gallery a more human element, Daniel had the idea of each artist having their own space within the gallery. We all loved the idea. Then taking it a step further, Chanais brought up the idea of incorporating different cultures to show how people in various parts of the world experience humanity. It is worth mentioning that throughout this entire discussion, we had Jason doing an excellent job of keeping the conversation going, as well as pushing us to think out of the box.

We then started discussing ways to take more advantage of it being in AR. It was Jason who suggested having the experience in an elevator, which is the idea we ended up sticking with. Lex brought up Meow Wolf, a company that creates multimedia art installations, and we were able to incorporate a lot of the ideas they use with our own project. From there it was just the matter of deciding what would be shown. We created a Slack channel for regular communication and sharing, and we took turns contributing to and handing in group assignments.

## Responses to Peer Critique Yesenia Duran

#### Safety and Accessibility Concerns

Some classmates expressed concern about physical safety (for example, being jumped) while experiencing Elevate AR. It's important to note that unlike a fully-immersive Virtual Reality experience which would block your awareness of your surroundings, this AR experience takes place only through the screen of a smartphone held in hand, so is less of a hindrance to situational awareness. That said, viewers will of course want to choose an elevator in which the use of a smartphone feels safe. In light of this feedback, however, we decided it makes sense to allow the viewer to select which elevator wall becomes the "window" through which they can view the exhibit, allowing them to position themself in the safest way. In addition, although the app is primarily designed with the AR-in-an-elevator experience in mind, viewers will also be able to view an exhibit in two additional modes: AR (but no elevator required) and non-AR (e.g., swiping the screen or using an input device to look around the exhibit.

#### Location

The other feedback was how do we decide what elevator has the option of the AR Art Gallery. The QR codes are going to be created to catch the attention of the consumers so this way they scan them and use it when they reach an elevator of their choice. This way they can experience it at the comfort of the elevator in their complex, their job, or shopping mall. This way they feel safe and comfortable to explore all floors and the convenience of viewing art without having to go very far!

#### Final Project Definition Jason Robinson

We think this project has potential to be moved "beyond the lab" and fully developed. I've received approval from my department Chair and scheduled a meeting next with Jake Friedman to discuss possible Amplifier funding.

For this project to become a reality, however, we would need:

- 1) A faculty sponsor.
- 2) Technical assistance, including faculty mentorship or partnership with e.g., ASU graduate students with XR development experience.
- 3) Funding, primarily for artist stipends, advertising, and marketing materials

### Next Steps Jason Robinson, Daniel Tucker, Lex Nelson

## Phase One: Initial Planning and Proof of Concept Design

This course gave us the opportunity to work through our initial planning and establish the project structure.

To consider this phase "final" though, we would need to create a basic proof of concept showing that our fundamental ideas can work. We're close — we have scanned two existing physical rooms and believe we can create a small-scale functional model, but we are running into technical challenges and may not have this complete before the end of the class.

## Phase Two: Creating the Elevate AR Experience

We'd need (at least) one Beyond the Lab course to put together a functional exhibit, gather the artists needed for our inaugural exhibition, and market the experience.

## Phase Three: Creating a Platform

The ultimate goal of Elevate AR is to exist as a *platform* — a set of polished tools that can be used by other artists across the globe to create and distribute their own exhibits.

This would be a much larger project both in terms of its technical development and marketing outreach, and would need a full product design approach.